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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,731	07/12/2001	Stan Janisiewicz	UIC 169	2946

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EXAMINER

FLETCHER, MARLON T

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 01/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,731

Applicant(s)

JANISIEWICZ ET AL.

Examiner

Marlon T Fletcher

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Landraf (4,322,665).

As recited in claim 1, Landgraf discloses a method for maintaining the power delivered by a motor including at least one phase coil, the method comprising the steps of: sensing a speed of said motor as discussed in the abstract and varying the inductance of said phase coil based on said sensed speed as discussed in the abstract and column 5, lines 38-64 and as seen in figures 5 and 6.

As recited in claim 2, Landgraf disclose the method, wherein the step of varying the inductance of said phase coil includes the step of varying the number of turns of said phase coil from a first number of turns to a second number of turns as discussed in the abstract and column 6, line 48 through column 7, line 40.

As recited in claim 3, Imai et al. disclose the method, wherein the step of varying the inductance of said phase coil is carried out by switching the number of turns of said phase coil from a first value to a second value as discussed in column 6, line 48 through column 7, line 40.

As recited in claim 4, Landgraf discloses the method, wherein the switching is carried out when said sensed speed reaches a reference speed (low and high) as discussed in the abstract.

As recited in claim 6, Landgraf discloses the method of claim 4 wherein said reference speed is the motor speed at which the motor force corresponding to a first number of turns (Main) of said phase coil is about the same as the motor force corresponding to a second number of turns (supplemental) of said phase coil.

As recited in claim 7, Landgraf discloses the method, further including a step of compensating said motor for said varying inductance of said phase coil as disclosed in the abstract.

As recited in claims 8, 9, and 13, Landgraf discloses the method, wherein said motor is a variable reluctance motor, which is a linear motor as seen in figure 4.

With respect to claim 10, Landgraf discloses a rotary motor as seen in figure 2.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 5, 11, and 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Landgraf in view of Imai et al.

Landgraf does not disclose feedback and saturation.

However, As recited in claim 5, Imai et al. disclose the method, wherein the switching is

carried out when said sensed speed is about the speed at which saturation of a core of a phase coil of said motor occurs as discussed in column 8, lines 3-56.

As recited in claims 11 and 12, Imai et al. disclose a motor including at least one phase coil, a system for maintaining motor power comprising: a sensor coupled to said motor, said sensor providing a feedback signal representative of a speed of said motor; a comparing circuit for comparison of said feedback signal to a reference signal and for providing a switching signal based on the results of said comparison; a switch coupled to said comparing circuit and responsive to said switching signal such that the number of turns of said phase coil is switched from a first value to a second value depending on the value of said feedback signal, wherein the a driving circuit coupled to said motor speed sensor and to said switch such that said switch switches the number of turns of said phase coil from said first number to a second number when said speed of said motor reaches a reference value as discussed in column 7, lines 23-27 and column 8, lines 3-56.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Imai et al. with the apparatus of Landgraf , because

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Imai et al. provides more detail to operation of the circuitry, wherein that detail can be applied to Landgraf to enhance the teachings thereof.

Response to Arguments

5. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T Fletcher whose telephone number is 703-308-0848. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Nappi can be reached on 703-308-3370. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.


Marlon T Fletcher
Primary Examiner
Art Unit 2837
